

EXHIBIT A

**IN THE UNITED STATES DISTRICT COURT
FOR THE SOUTHERN DISTRICT OF TEXAS
HOUSTON DIVISION**

NALEX ENERGY, LLC	§	
Plaintiff,	§	
	§	
VS.	§	
	§	Civ. No. 4:22-cv-01824
LAURITZEN BULKERS A/S,	§	FED. R. CIV. P. 9(h)
J. LAURITZEN (U.S.A.), INC.,	§	Admiralty Claim
J. LAURITZEN A/S AND	§	
DEAL ENERGY A/S	§	
Defendants.	§	

**DEFENDANT LAURITZEN BULKERS A/S' ANSWER
TO THE VERIFIED ORIGINAL COMPLAINT AND
COUNTERCLAIM**

Defendant Lauritzen Bulkera A/S ("Lauritzen")¹ in answer to the Verified Original Complaint (the "Complaint") respectfully would show the Court as follows.

Jurisdiction and Venue

1. Admits the allegations contained in paragraph 1 of the Complaint.
2. Admits that venue for this civil action is proper in this judicial district pursuant to 28 U.S.C. § 1391(b) in answer to paragraph 2 of the Complaint.

Parties

3. Admits the allegations contained in paragraph 3 of the Complaint.
4. In response to paragraph 4 of the Complaint, admits that defendant Lauritzen is a foreign business entity organized under the laws of Denmark and located at 15 Tuborg Havnevej 2900 Hellerup, Denmark, that Defendant Lauritzen is engaged in business as a charterer and operator of bulk carriers which call at Texas ports, was the charterer of the M/V SHANGHAI at all times

¹ Plaintiff Nalex and Defendant Lauritzen are working on a stipulation that would dismiss the Verified Original Complaint against Defendants J. Lauritzen (U.S.A.), Inc., J. Lauritzen A/S, and Deal Energy A/S on a without prejudice basis. A Stipulation to that effect is being reviewed and the parties anticipate filing it with the Court shortly.

material to this Complaint, and procured the bunkers for which payment has been made by Defendant Lauritzen under protest and without prejudice, further that Defendant Lauritzen does not maintain a regular place of business or a designated agent upon whom service of process may be had, but except as so specifically admitted herein, denies the remaining allegations in paragraph 4 of the Complaint. Defendant Lauritzen has signed a waiver of service of process pursuant to Rule 4, Federal Rules of Civil Procedure and therefore, formal service of process on defendant is not required and the allegations regarding formal service of process need not be answered. Since Defendant Deal Energy A/S has been or will be dismissed from the action on agreement of Plaintiff and Defendant Lauritzen, the allegations regarding Deal Energy A/S need not be answered.

5. Defendants J. Lauritzen (U.S.A.), Inc. and J. Lauritzen A/S have been or will be dismissed from the action on agreement of Plaintiff and Defendant Lauritzen, the allegations regarding Defendants J. Lauritzen (U.S.A.), Inc. and J. Lauritzen A/S need not be answered.

Factual Background

6. Admits that Nalex brought this action to recover amounts allegedly due and owing to it under a maritime contract with Lauritzen for the supply of marine fuel oil (known in the marine industry as “bunkers”) to the M/V SHANGHAI (IMO: 9220988) (hereinafter the “SHANGHAI” or “the Vessel”), but except as so specifically admitted herein, denies the remaining allegations contained in paragraph 6 of the Complaint.

Nalex and Lauritzen entered into a contract for the supply of bunkers.

7. Admits the allegations contained in paragraph 7 of the Complaint.

8. Admits the allegations contained in paragraph 8 of the Complaint.

9. Admits that Nalex’s General Terms govern the parties’ rights with respect to the subject bunker delivery, that section 1.2 of Nalex’s General Terms defines the term “Buyer” to mean “the party and/or parties contracting to buy products and/or services as set out in the Seller’s Confirmation

of Order for Products and/or Services, including its servants, agents, brokers, designated representatives, subsidiaries or affiliates wherever applicable.” Ex. 3, General Terms, p. 1, art 1.2, that the Confirmation Order provides that “Lauritzen Bulkers A/S” is the “buyer” for the subject sale of bunkers. Ex. 2, that pursuant to Section 7.14, Lauritzen also warranted that it had express authority from the Vessel’s owner to purchase the bunkers. Ex. 3, General Terms, p. 1, art 7.14., but except as so specifically admitted herein, denies the remaining allegations contained in paragraph 9 of the Complaint.

10. Admits that the Confirmation Order requires payment for the bunkers within 30 calendar days of delivery and provides for the accrual of interest on any late payment. Ex. 2, General Terms, p. 6, art 9.4, that Nalex’s General Terms state that “[t]imely payment is of the essence. [Nalex] shall be absolutely entitled to the payment in full without discount, reduction, counterclaim or set off (whether legal or equitable)” *Id.*, art. 9.1, that Nalex’s General Terms further provide that “. Buyer shall not be entitled without Seller’s consent in writing, to offset any amounts for claims against seller, whether or not these claims are connected, and whether or not they arise out of the contract.” *Id.*, art. 9.2, but except as so specifically admitted herein, denies the remaining allegations contained in paragraph 10 of the Complaint.

Nalex supplies bunkers to the SHANGHAI

11. Admits the allegations contained in paragraph 11 of the Complaint.

12. Denies knowledge or information sufficient to believe the truth of the matters asserted in paragraph 12 of the Complaint and therefore, denies the allegations contained in paragraph 12 of the Complaint.

13. Admits that a Marine Fuel Delivery Receipt (hereinafter “BDN”) was signed by the Vessel’s Chief Engineer and stamped with the seal of the Vessel acknowledging receipt of the subject bunkers. Ex. 4, Marine Fuel Delivery Receipt and that the BDN also provides the seal

numbers for the above-described fuel samples obtained, but except as so specifically admitted herein, denies the remaining allegations contained in paragraph 12 of the Complaint.

Lauritzen complains about the quality of the bunkers

14. Admits that on April 30, 2022, Lauritzen advised Nalex that the Vessel's owners testing of the supplied bunkers shows cat fines above the tolerable limits of ISO 8217, that the Vessel owner's test results indicated that the aluminum and silicone levels, typically combined to determine the content level of cat fines, were above the tolerable amount of 60mg/kg, and that the sample tested by the Vessel's owners selected laboratory was collected from the Vessel's inlet manifold by continuous drip sample method, but except as so specifically admitted herein, denies the remaining allegations contained in paragraph 14 of the Complaint.

15. Denies knowledge or information sufficient to form a belief as to the truth of the matters asserted in paragraph 15 of the Complaint, but except as so denied, admits that Lauritzen requested a further testing of a bunker sample with a full ISO specification.

16. Admits that Lauritzen requested that Nalex suggest an independent laboratory that can complete joint testing of one of the representative samples indicated on the BDN and that Nalex responded to Lauritzen by proposing AmSpec, Camin Cargo, or Inspectorate as the laboratory to conduct final and binding testing of aluminum and silicone from a representative sample, but except as so specifically admitted herein, denies the remaining allegations contained in paragraph 16 of the Complaint.

17. Admits the allegations contained in paragraph 17 of the Complaint.

18. Admits that Section 5.4 of Nalex's General Terms provides in part: "*Where reasonably practical, the samples shall be taken in accordance with ISO-8217, but shall otherwise be taken at a point and in a manner chosen by Seller or its representative.*" See Ex. 3, and that

Paragraph 4 of ISO-8217 provides that “*samples for quality verification may be taken in any location agreed between the parties,*” but except as so specifically admitted herein, denies the remaining allegations in paragraph 18 of the Complaint.

19. Denies the allegations contained in paragraph 19 of the Complaint.

20. Denies the allegations contained in paragraph 20 of the Complaint and that Lauritzen agreed that the test results would be final and binding on the parties, but except as so denied herein, admits that Lauritzen advised, “*As to the test results being final and binding, we can deal with same as per the supply contract terms.*”

AmSpec’s final and binding analysis confirms the bunkers are on-spec

21. Admits that upon receipt of AmSpec’s analysis, Lauritzen advised Nalex that the Vessel would like to perform additional testing on the representative sample and also perform further testing of samples obtained from the vessel manifold, that Nalex rejected Lauritzen’s proposal for additional testing, that Nalex reiterated that AmSpec’s analysis is final and binding on the parties, that Nalex rejected Lauritzen’s proposal for additional testing, and that Nalex reiterated that AmSpec’s analysis is final and binding on the parties, and advised Lauritzen that it considered the claim closed, but except as so specifically admitted herein, denies that AmSpec’s analysis was final and binding on the parties and denies the remaining allegations contained paragraph 21 of the Complaint.

22. Denies that AmSpec’s analysis was final and binding on the parties and denies the allegations contained in paragraph 22 of the Complaint.

23. Admits that section 5.6 of Nalex’s General Terms provide that “[u]nless otherwise agreed to in writing by Seller, only samples provided by Seller to Buyer at the time of delivery shall be deemed representative of the Product delivered,” and that section 5.5 provides that “[i]f . . . no agreement has been reached by the two parties, Seller reserves the right to have one its retained

sealed samples independently analyzed and for the results to be final and binding upon both parties,” but except as so specifically admitted herein, denies that the AmSpec analysis was final and binding on the parties and denies the remaining allegations contained in paragraph 23 of the Complaint.

Lauritzen is in breach of its contract with Nalex

24. Admits that the purchase price of the subject bunkers was \$249,804.58, but except as so specifically admitted herein, denies the remaining allegations contained in paragraph 24 of the Complaint.

25. Admits that payment for the bunkers was duly demanded by Nalex, but except as so specifically admitted herein, denies the remaining allegations contained in paragraph 25 of the Complaint. On or about July 28, 2022, Lauritzen paid the sum of \$249,804.58 to Nalex under protest and without prejudice to any of its rights and/or defenses.

Breach of Maritime Contract against Lauritzen

26. Lauritzen repeats, re-alleges, and incorporates as if fully set forth herein, the foregoing paragraphs.

27. Admits that Lauritzen and Nalex entered into a contract for the purchase and delivery of bunkers to its chartered vessel and that Nalex provided bunkers to the M/V SHANGHAI pursuant to the terms of the Confirmation Order and its General Terms, but except as so specifically admitted herein, denies the remaining allegations contained in paragraph 27 of the Complaint. On or about July 28, 2022, Lauritzen paid the sum of \$249,804.58 to Nalex under protest and without prejudice to any of its rights and/or defenses.

Unjust Enrichment/Quantum Meruit against Lauritzen

28. Lauritzen repeats, re-alleges, and incorporates as if fully set forth herein, the foregoing paragraphs.

29. Denies the allegations contained in paragraph 29 of the Complaint. On or about July 28, 2022, Lauritzen paid the sum of \$249,804.58 to Nalex under protest and without prejudice to any of its rights and/or defenses.

30. Denies the allegations contained in paragraph 30 of the Complaint. On or about July 28, 2022, Lauritzen paid the sum of \$249,804.58 to Nalex under protest and without prejudice to any of its rights and/or defenses.

Suit on Account against Lauritzen and Deal Energy

31. Lauritzen repeats, re-alleges, and incorporates as if fully set forth herein, the foregoing paragraphs.

32. Denies the allegations contained in paragraph 32 of the Complaint. On or about July 28, 2022, Lauritzen paid the sum of \$249,804.58 to Nalex under protest and without prejudice to any of its rights and/or defenses.

33. Denies the allegations contained in paragraph 33 of the Complaint. On or about July 28, 2022, Lauritzen paid the sum of \$249,804.58 to Nalex under protest and without prejudice to any of its rights and/or defenses.

Conditions Precedent

34. Denies the allegations contained in paragraph 34 of the Complaint (improperly numbered 30 in the original Complaint).

Reservation of Claims against the M/V SHANGHAI, *in rem*, pursuant to Rule C of the Supplemental Admiralty Rules

35. Denies the allegations contained in paragraph 35 of the Complaint (improperly numbered 31 in the original Complaint). On or about July 28, 2022, Lauritzen paid the sum of \$249,804.58 to Nalex under protest and without prejudice to any of its rights and/or defenses. Any

maritime lien that may have existed against the M/V SHANGHAI was extinguished by payment of the underlying debt upon which Nalex's claim is based.

Waiver

36. Denies the allegations contained in paragraph 36 of the Complaint (improperly numbered 32 in the original Complaint).

FIRST AFFIRMATIVE DEFENSE

37. The Complaint fails to state a claim upon which can be granted.

SECOND AFFIRMATIVE DEFENSE

38. Nalex's claim which is the subject of this action has been extinguished by payment of the claim by Lauritzen on or about July 28, 2022, under protest and without prejudice to any of its rights and/or defenses.

LAURITZEN'S COUNTERCLAIM AGAINST NALEX

Defendant Lauritzen, as and for a Counterclaim against Plaintiff Nalex, alleges as follows:

39. Lauritzen repeats, re-alleges, and incorporates as if fully set forth herein, the foregoing paragraphs.

40. At the time the Nalex bunkers were supplied, the M/V SHANGHAI (the "Vessel") was under time charter to Lauritzen. One of Lauritzen's obligations under the time charter was to purchase bunkers to operate the Vessel between the various ports for which it was chartered to carry cargo.

41. In its Counterclaim, Lauritzen seeks compensation for the supply by Nalex of marine fuel oil (commonly referred to as "bunkers") to the Vessel that did not meet the contractual specification for two parameters, aluminum and silicon (together referred to a "catfines").

42. The contractual specification for catfines is contained in the international standard ISO

8217:2017, which provides for a maximum permissible content for catfines (*i.e.*, aluminum + silicon) of 60 mg/kg.

43. During the physical delivery of the bunkers from the Kirby Marine bunker barge 27735 via hose to the Vessel's bunker intake manifold, the Vessel took continuous drip samples of the bunkers. Two of the continuous drip samples taken at the Vessel's bunker intake manifold on the date of delivery, April 25, 2022, were analyzed and indicated a catfines content far in excess of the maximum permissible by ISO 8217:2017 – 118 mg/kg (Intertek Lintec Fuel Quality Report – Ex. A attached) and 102 mg/kg (Intertek Caleb Brett – Ex. B attached) versus 60 mg/kg permitted by the ISO standard. A third sample taken from bunker tank no. 3S after the bunkers supplied by Nalex had been taken on board the Vessel were analyzed and also indicated a catfines content well in excess of the maximum permissible – 99 mg/kg (Intertek Caleb Brett – Ex. C attached). The analyses of these samples clearly show that the bunkers supplied by Nalex were off-specification for catfines by significant amounts.

44. In its Complaint, Nalex relies on two laboratory analyses for the proposition that the bunkers supplied to the Vessel were on-specification because the catfines content was 17 ppm (AmSpec 5/2/22) for one of the bunker samples (seal # 1191919) from the Kirby Marine barge (Dkt. No. 1-7) and the catfines content was 34 ppm (Intertek Caleb Brett 5/5/22) for a second bunker sample (seal #1191918) from the Kirby barge (Dkt. No. 1-5). Both of the results – 17 ppm and 34 ppm – were less than the 60 mg/kg maximum permitted under the ISO standard.

45. In October 2022, bunker samples (seal # 0153995 and # 1191920) from the Kirby Marine barge were analyzed with the results of 31 ppm and 30 ppm respectively for catfine content (Exs. D and E). These results were similarly less than the maximum permitted under the ISO standard.

46. What the test results from all of these analyses indicate is that all four Kirby Marine

barge samples were found to be outside the reproducibility of the Vessel manifold drip samples, indicating that the barge samples were significantly different than the Vessel manifold samples in regard to catfine content.

47. These analyses also showed that with the other parameters of the bunkers, based on Table 2 of the ISO standard, being comparable between the Vessel bunker manifold and barge external line samples, the barge external line bunker samples were underestimating the catfine content due to the manner in which the barge samples were drawn. The significant difference in the catfine content between the Vessel manifold samples and barge samples was due to (a) the barge external line samples were likely spot samples (rather than continuous drip samples) and/or (b) the samples drawn from the barge external line were not mixed properly prior to sub-sampling.

48. As a result, the bunkers that were actually received on the Vessel on April 25, 2022, were off-specification because they did not comply with the ISO standard agreed in the contract between Nalex and Lauritzen. Therefore, Nalex has breached the warranty that the bunkers supplied would meet the contractual specifications contained in the ISO standard.

49. Since the bunkers supplied by Nalex were off-specification, the Vessel refused to use these bunkers as fuel for the Vessel's engines for fear of causing damage to the engines and other machinery aboard the Vessel.

50. Inasmuch as the Vessel did not have sufficient bunkers on board to reach the next cargo port, the Vessel had to divert to Freetown, Bahamas and purchase replacement bunkers at a cost of \$248,200. The port costs of diverting the Vessel to Freetown to obtain replacement bunkers was approximately \$50,000. The Owners of the Vessel have sought to recover the cost of replacement bunkers and port costs from Lauritzen in a separate proceeding.

51. Also, as a result of the Nalex bunkers being off-specification, Lauritzen was required

to retain marine surveyors and experts to determine the nature, cause, and extent of the off-specification bunkers. The cost of these marine surveyors and experts is currently approximately \$15,000 and will increase as additional invoices for these services are received.

52. Since the off-specification bunkers could not be used on board the Vessel as marine fuel, efforts were made in May 2022 to sell them in off-specification condition. No bunker or salvage company showed an interest taking in these bunkers, except for one who agreed to de-bunker the Vessel and take the off-specification bunkers for payment of \$13,000 to do so. Thus, the bunkers supplied by Nalex had no value as off-specification bunkers. The Owners of the Vessel have sought to recover the \$13,000 cost of de-bunkering the Nalex bunkers in a separate proceeding. In addition to the cost of de-bunkering, the Vessel also lost time during the course of de-bunkering and related time loss. The value of this lost time is \$47,113.26 and Owners have claimed this amount from Lauritzen in a separate proceeding.

53. Lauritzen is also entitled to damages for Nalex's breach of warranty under the contract to supply bunkers to the Vessel. The damages for breach of warranty by Nalex is the value of the bunkers as warranted in the contract less the value of the bunkers as off-specification. In this instance, the value of the bunkers as warranted would be \$249,804.58, the price paid by Lauritzen, less the zero value as off-specification bunkers. Therefore, Lauritzen is entitled to \$249,804.58 in damages from Nalex for breach of warranty on the sale of the bunkers to Lauritzen.

54. In sum, Lauritzen seeks to recover the following sums from Nalex:

- a. \$249,804.58 – see paragraph 53;
- b. \$248,200 + \$50,000 – see paragraph 50;
- c. \$15,000 – see paragraph 51; and
- d. \$13,000 + \$47,113.26 – see paragraph 52.

TOTAL \$623,117.84

WHEREFORE, Defendant Lauritzen Bulkers A/S prays that:

- a. a judgment issue against Nalex and in favor of Lauritzen dismissing Nalex's Verified Original Complaint together with an award of costs and attorneys' fees in favor of Lauritzen;
- b. a judgment issue against Nalex and in favor of Lauritzen awarding Lauritzen \$623,117.84 in damages on the Counterclaim plus interest, costs, and attorneys' fees; and
- c. the Court grant Lauritzen such other and further relief as it may see fit.

Dated: November 9, 2022

Respectfully submitted,

Lyons & Flood, LLP

As Attorneys for Defendant Lauritzen Bulkers A/S

/s/ Kirk M. Lyons

Kirk M. Lyons

Admitted Pro Hac Vice

The Towers, Suite 206

111 Great Neck Road

Great Neck, NY 11021

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klyons@lyons-flood.com

Certificate of Service

The foregoing Answer with Counterclaim was served on all counsel of record via the Court's ECF system on November 9, 2022.

/s/ Kirk M. Lyons
Kirk M. Lyons

EXHIBIT A

Intertek Lintec

Fuel Quality Report

SHANGHAI (9220988)

NOLA • 25/04/2022



Overview

Aluminium + Silicon content (Result 118 mg/kg against 60 mg/kg limit)

Sample information has been collated from the vessel's bunker data form and sample bottle label.

Sample No.	DL388245	Grade Ordered	RMG380
Client	Intership Navigation Co Ltd	Sulphur Grade	0.50% max
Received by Lab	29/04/2022	Quantity Supplied	260.41 M.T.
Terminal			

Bunker Information		Sample Seal Information		Courier Information	
Bunker Port	NOLA	Seal Condition	Intact	DHL PAD Used	No
Bunker Date	25/04/2022	Analysis Sample	0273939/0300780	DHL PAD Comments	
Sample Date	25/04/2022	Supplier Sample		Courier	
Fuel Supplier	V Marine Fuels	Vessel Sample		Airway Bill No.	8720945354
Barge	Not Stated	Marpol Sample			
Sample Location	Vessel manifold				
Sample Method	Continuous drip				

	Density (kg/m³@15°C)	Viscosity (cSt@50°C)	Sulphur (%mass)
Specification	991.0	380.0	0.50
Supplier BDR	932.2	20.92	0.485
Analysed sample	931.0	37.56	0.47

Parameter	Result	Units	Spec Limit	Test Variance (±)	Method
Viscosity (50°C)	37.56	cSt@50°C	380.0 max	18.97	ISO 3104* (20)
Density	931.0	kg/m³@15°C	991.0 max	0.9	ISO 12185* (96)
CCAI	822	Index #	870 max		ISO 8217:B
Sulphur	0.47	% mass	0.50 max	0.030	ISO 8754 (03)
Flash Point	>70.0	°C	60.0 min		ISO 2719* (16)
Acid Number	0.20	mg KOH/g	2.50 max	0.50	ASTM D664 (18)
Total Sediment	0.05	% mass	0.10 max	0.05	ISO 10307-2 (09)
Micro Carbon Residue	3.07	% mass	18.00 max	0.99	ISO 10370 (14)
Pour Point	+27	°C	30 max	4	ISO 3016 (19)
Water	0.15	% vol	0.50 max	0.12	ISO 3733 (99)
Ash	0.074	% mass	0.100 max	0.014	ISO 6245 (01)
Vanadium	7	mg/kg	350 max	33	IP 501 (05)
Sodium	48	mg/kg	100 max	8	IP 501 (05)
Aluminium plus Silicon	118*	mg/kg	60 max	12	IP 501 (05)
Net Specific Energy	41.77	MJ/kg			ISO 8217:A
Calcium	29	mg/kg			IP 501 (05)

Parameter	Result	Units	Spec Limit	Test Variance (±)	Method
Zinc	7	mg/kg			IP 501 (05)
Phosphorus	8	mg/kg			IP 501 (05)
Aluminium	60	mg/kg			IP 501 (05)
Silicon	58	mg/kg			IP 501 (05)
Iron	24	mg/kg			IP 501 (05)
Nickel	7	mg/kg			IP 501 (05)
Magnesium	6	mg/kg			IP 501 (05)
Lead	<1	mg/kg			IP 501 (05)
Compatibility	2	Spot #			ASTM D4740 (20)
Injection Temp @ 10 cSt	95	°C			
Injection Temp @ 12 cSt	88	°C			
Injection Temp @ 15 cSt	79	°C			
Injection Temp @ 17 cSt	75	°C			
Injection Temp @ 20 cSt	69	°C			
Injection Temp @ 22 cSt	66	°C			
Minimum Pumping Temp @1000 cSt	37	°C			

* result exceeds specification.

Sample results are compared with the specification for RMG380 ISO 8217:2012 for the parameters reported.

Analysis has been carried out on samples as received, independent of sampling procedure, using the latest versions of all test methods.

* Validated modifications to these methods have been incorporated.

ONBOARD FUEL BLENDING IS NOT RECOMMENDED.

Refer to your engine manufacturer's guidelines for max/min alarm settings.

Engineering Notes

Aluminium + Silicon content (Result 118 mg/kg against 60 mg/kg limit)

The sample result indicates the presence of abrasive contaminants. If not removed, possible wear damage may occur to fuel pump plungers and barrel, injector needles and cause increased cylinder liner and piston ring wear.

On the above basis, we would recommend that this fuel is NOT USED pending confirmation that the sample submitted to our laboratory was representative of the product supplied. If possible, samples should be taken from the bunker tanks and submitted for analysis. We would also recommend that the possibility of obtaining samples before and after the purifiers, without adversely affecting the operation of the main engine, be investigated. As with the taking of all samples, it is essential that the chief engineer makes every effort to ensure that the most representative sample possible is taken. If the sample is to be taken from the transfer pump then the tanks should be circulated for at least 30 mins prior to this. Furthermore, the sampling point should be cleared of all other product by running through several litres of this fuel prior to the taking of the sample.

Analysis of these samples will give an indication of the efficiency of the purifiers and the Al + Si content of the fuel that has been through the pre-treatment process. If these results are confirmed outside critical operating levels, it must be stressed that the vessel probably will suffer damage to the engine through the use of this fuel.

Typically the engine manufacturers set operating levels of 10 - 15 mg/kg at the point of injection. Centrifuges run efficiently between 70 - 90 % separation. Please check with your engine manufacturer for details.

However, if the vessel has no other alternative than to use the fuel, it is important that the fuel is efficiently centrifuged.

- * The Centrifuges should be run in series as clarifier/clarifier.
- * The purifier should be checked to ensure that the optimum gravity disc is installed and the lowest possible flow-rate should be used (just enough to meet daily consumption).
- * If possible, change the filter between service tank and engine to the lowest available.

In supplying this advice we have focused on the application of a traditional purifier / clarifier and the set up needed to deal with this particular product.

However, we fully appreciate that not all vessels have a "traditional" purifier set up or capability. Should your vessel be fitted with an alternative system or high density purifier (an ALCAP purifier for example) we would suggest that specific advice be sought from the manufacturer regarding its capabilities in dealing with this product.

We would suggest that the suppliers are put on notice and the retained sample on board the vessel is secured pending further investigation.

-
- Do you have enough sample bottles?
 - If not, please refer to your instruction folder for supply details.
 - Alternatively, contact the Intertek Lintec Logistics Department at lintec.testing@intertek.com or call 0044 1325 390180.
 - Reports can also be viewed online at <https://sentinel.intertek-lintec.com> if you require assistance to access your account, please contact lintec.results@intertek.com
 - Please let us know you have a sample ready for collection and use the Priority Advantage Desk (PAD) by using the web page <https://intertek-lintec.com/>
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Enterprise House
Valley Street North
Darlington
DL1 1GY
United Kingdom

Signed
Reported By
Report Date

Narinder Singh
30/04/2022

EXHIBIT B

intertek

caleb brett

Report of Analysis

Client: Lintec Testing Services Ltd.

Job Location: Borco Terminal

Vessel: SHANGHAI

Our Reference Number: BA100-0009494

Lab Reference Number: 2022-BHMS-000178

Client Reference Number:

9220988

Description	Method	Test	Result	Units
FUEL OIL 25-Apr-2022 2022-BHMS-000178-002	Shanghai - Vessel Manifold Continuous Drip IP 501	Submitted Sample	Sample Only	
		Aluminium	50	mg/kg
		Silicon	52	mg/kg
		Aluminium + Silicon	102	mg/kg

This report has been reviewed for accuracy, completeness, and comparison against specifications when available. The reported results are only representative of the samples submitted for testing. This report shall not be reproduced except in full without approval of the laboratory.

Signed:



Grahaem Rettie, Laboratory Manager

Date: 5 May, 2022



EXHIBIT C

Report of Analysis

intertek
caleb brett

Client: Lintec Testing Services Ltd.

Client Reference Number:

Job Location: Borco Terminal

9220988

Vessel: SHANGHAI

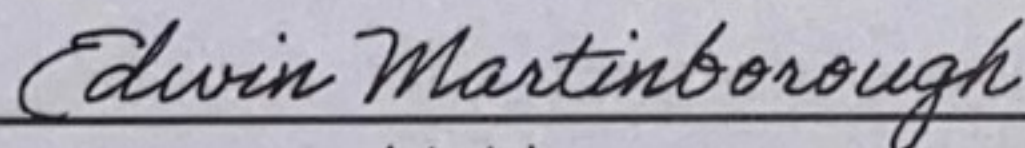
Our Reference Number: BA100-0009494

Lab Reference Number: 2022-BHMS-000178

Description	Method	Test	Result	Units	Spec Limit
FUEL OIL 07-May-2022 2022-BHMS-000178-009	SHANGHAI Resample Composite				
	ASTM D7042	Kinematic Viscosity @ 50°C	40.19	cSt	Max 380
	ASTM D4052	Density @ 15°C	899.8	kg/m³	Max 991.0
		API Gravity at 60 deg F	20.4	°API	Min 11.3
	ISO 8217 F	CCAI	789.5		Max 870.0
	ASTM D4294	Sulfur Content	0.500	Wt %	
	ASTM D93	Procedure Used	B		
		Corrected Flash Point	108.0	°C	Min 60.0
	IP 570	Hydrogen Sulfide Content	<0.40	mg/kg	Max 2.00
	ASTM D664	Acid Number	0.25	mg KOH/g	Max 2.50
	ASTM D4870-X1	Accelerated Total Sediment (Procedure B)	0.10	%(m/m)	Max 0.10
	ASTM D4530	Average Micro Method Carbon Residue	3.30	Wt %	Max 18.0
	ASTM D97	Pour Point	30	°C	Max 30
	ASTM D95	Water Content	0.20	Vol %	Max 0.50
	ASTM D482	Ash	0.023	Wt %	Max 0.100
	IP 501	Vanadium	7	mg/kg	Max 350
		Sodium	61	mg/kg	Max 100
		Aluminium	49	mg/kg	
		Silicon	50	mg/kg	
		Aluminium + Silicon	99	mg/kg	Max 60
		Calcium	27	mg/kg	Max 30
		Zinc	16	mg/kg	Max 15
		Phosphorus	8	mg/kg	Max 15

This report has been reviewed for accuracy, completeness, and comparison against specifications when available. The reported results are only representative of the samples submitted for testing. This report shall not be reproduced except in full without approval of the laboratory.

Signed: _____



Intertek

Date: May 8th, 2022



EXHIBIT D



1107 Center Street, Pasadena, TX 77506
Tel: (832)-900-7010 Fax: (832)-834-5549
www.nmkresources.com



ISO/IEC 17025:2017 Certificate No.: L17-215

CERTIFICATE OF ANALYSIS

Sample Source	Submitted Sealed Sample-Vessel Shanghai	File No.:	004-22-00980
Movement Type:	Submitted for testing & Witnessing	Sample ID:	P2210-0097
Client:	Lauritzen Bulkers A/S	Date Sampled:	10/11/2022 12.00
Location:	Submitted via Courier	Date Reported:	10/12/22
Product:	VLSFO	Client Reference:	Seal#0153995

TEST	METHOD	UNIT	RESULT	MIN	MAX
API Gravity	D-4052	API @ 60°F	20.4	11.2	
Density	D-4052	Kg/m ³ @15°C	931.1		991.0
Viscosity, Kinematic	D-445	CST @ 50°C	43.45		380.0
Sulfur	D-4294	weight%	0.479		0.500
Pour Point	D-97	°C/°F	24 / 75		30/ 86
Flash Point	D-93B	°C/°F	106 / 223	60 / 140	
Water by Distillation	D-95	volume%	<0.05		0.50
Ash	D-482	weight%	0.018		0.100
TSA	D-4870	weight%	0.04		0.10
TSP	D-4870	weight%	0.06		0.10
Micro Carbon Residue	D-4530	weight%	3.09		18.00
Vanadium	IP-501	PPM	5		350
Sodium	IP-501	PPM	16		100
Aluminum	IP-501	PPM	14		
Silicon	IP-501	PPM	17		
Aluminum+Silicon	Calculation	PPM	31		60
Calcium	IP-501	PPM	17		30
Zinc	IP-501	PPM	5		15
Phosphorus	IP-501	PPM	5		15
Nickel	IP-501	PPM	7		
Total Acid #	D-664	mg KOH/g	0.21		2.5
CCAI	ISO-8217	Index	820		870

A.Elchazli

NMK Representative

RESULTS ARE VALID "AS AT" DATE AND LOCATION LISTED

EXHIBIT E



1107 Center Street, Pasadena, TX 77506
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www.nmkresources.com



ISO/IEC 17025:2017 Certificate No.: L17-215

CERTIFICATE OF ANALYSIS

Sample Source	Submitted Sealed Sample-Vessel Shanghai	File No.:	004-22-00980
Movement Type:	Submitted for testing & Witnessing	Sample ID:	P2210-0096
Client:	Lauritzen Bulkers A/S	Date Sampled:	10/11/2022 12.00
Location:	Submitted via Courier	Date Reported:	10/12/22
Product:	VLSFO	Client Reference:	Seal#1191920

TEST	METHOD	UNIT	RESULT	MIN	MAX
API Gravity	D-4052	API @ 60°F	20.4	11.2	
Density	D-4052	Kg/m ³ @15°C	931.0		991.0
Viscosity, Kinematic	D-445	CST @ 50°C	42.23		380.0
Sulfur	D-4294	weight%	0.486		0.500
Pour Point	D-97	°C/°F	24/ 75		30/ 86
Flash Point	D-93B	°C/°F	106 / 223	60 / 140	
Water by Distillation	D-95	volume%	<0.05		0.50
Ash	D-482	weight%	0.020		0.100
TSA	D-4870	weight%	0.05		0.10
TSP	D-4870	weight%	0.07		0.10
Micro Carbon Residue	D-4530	weight%	3.16		18.00
Vanadium	IP-501	PPM	5		350
Sodium	IP-501	PPM	13		100
Aluminum	IP-501	PPM	13		
Silicon	IP-501	PPM	17		
Aluminum+Silicon	Calculation	PPM	30		60
Calcium	IP-501	PPM	17		30
Zinc	IP-501	PPM	5		15
Phosphorus	IP-501	PPM	5		15
Nickel	IP-501	PPM	7		
Total Acid #	D-664	mg KOH/g	0.26		2.5
CCAI	ISO-8217	Index	820		870

A.Elchazli

NMK Representative

RESULTS ARE VALID "AS AT" DATE AND LOCATION LISTED